APPENDIX

IN THE CLAIMS:

Please enter the following amended claims from the International Preliminary Examination report as follows:

1. (Amended) A data segmentation method in a telecommunications system, [characterized by the steps of] comprising:

segmenting larger data units of a higher layer into smaller protocol data units [(PDU)] of a lower layer so that each lower layer [PDU comprises] protocol data unit includes one or more data segments each containing data from a different one of the upper layer data units[,];

providing the lower layer protocol data units containing two or more data segments, with segmentation length information which otherwise indicates [the] length of the data segments[,];

indicating with predetermined values of the segmentation length information, special information about the higher level [PDU] protocol data units instead of the length of the segments;[segment,]

transmitting the lower level [PDUs] protocol data units to a receiving end[,]; and

assembling the segmented higher level data unit at the receiving end by means of the segmentation length information.

2. (Amended) The method [as claimed in] of claim 1, [characterized by said] wherein the special information [including] includes indication whether the higher layer data unit ends in [the] a current data segment or continues to [the] a next lower level [PDU] protocol data units.

3. (Amended) The method [as claimed in] of claim 1 [or 2], further comprising [characterized by the step of] indicating with a predetermined value of the segmentation length information that the rest of the lower level [PDU] protocol data unit contains padding until [the] a next segmentation length information or [to the] a next lower level [PDU] protocol data unit contains padding.

4. (Amended) The method [as claimed in] of claim 1[, 2 or 3], [characterized by the step of] further comprising indicating with the segmentation length information [pointing exactly] an exact point in [to] the end of the lower layer [PDU] protocol data unit that the higher layer data unit ends.

5. (Amended) The method [as claimed in] of claim 1[, 2, 3 or 4], [characterized by the step of] further comprising indicating with a predetermined value of the segmentation length information that the higher layer data unit carried in [the] a current data segment continues to [the] a next lower level [PDU] protocol data unit.

6. (Amended) The method [as claimed in any one] of [claims 1-5] claim 1, [characterized by the step of] further comprising providing no segmentation information in a lower layer [PDU] protocol data unit which contains data only from a single one of the higher layer data units and [contain] no padding.

7. (Amended) The method [as claimed in any one] of [claims 1-6] claim 1, [characterized by the step of] further comprising

providing segmentation information in a lower layer [PDU] protocol data unit which contains data only from a single one of the higher layer data units and padding.

8. (Amended) The method [as claimed in any one] of [claims 1-7] claim 1, [characterized by the steps of] further comprising:

providing each lower level [PDU] protocol data unit with two or more payload units of a predetermined length, the payload [unit] units being [the] a smallest unit in a retransmission protocol employed[,];

carrying [said] the segmented higher layer data units in [said] the payload units[,];

providing a segmentation indicator field in [the] a beginning of one or more of the payload units in the lower level [PDU] protocol data unit, if required[,]; and

indicating in [the] a header of the lower layer [PDU] protocol data unit which one or ones, if any, of the payload units contain the segmentation length information.

9. (Amended) The method [as claimed in any of] of [claims 1-8] claim 8, [characterized by the step of] further comprising providing a segmentation indicator field in [the] a beginning of [the] a first one of the payload units for indicating segmentation information for all segments in the lower level [PDU] protocol data unit, if required.

10. (Amended) A telecommunications system, [characterized by] comprising

an upper protocol layer [(L3, RRC;LAC)] [comprising] including upper layer data units [(SDU),];

a lower protocol layer [(L2, RLC)] including [comprising] protocol data [unit (PDU)] units having a payload size smaller than [said] the upper layer data units [(SDU),];

means segmenting [said] the upper layer data units [(SDU)] for insertion into smaller protocol data units [(PDU)] of a lower layer so that each lower layer [PDU] protocol data unit

includes [comprises] one or more data segments, each containing data from a different one of the upper layer data units [(SDU),];

means for inserting [a] segmentation length information [(LI)] which [otherwise] indicates [the] length of the data segments at least in the lower layer [PDUs] protocol data units containing two or more data segments[,];

means for [giving] providing a predetermined value in the segmentation length information [(LI) in order to provide] to a receiver, the predetermined value including [with] special information about the higher level data [unit (SDU)] units instead of the length of the [segment,] data segments; and

means for assembling the segmented higher level data [unit (SDU)] units from received lower layer [PDUs] protocol data units at the receiver by means of the segmentation length information in [said PDUs] the protocol data units.

11. (Amended) The system [as claimed in] of claim 10, [characterized by] further comprising a predetermined value of the segmentation length information [(LI)] indicating to the receiver that [the] a rest of the lower level [PDU] protocol data unit contains no padding until [the] a next segmentation length information or [to the] a next lower level [PDU] protocol data unit contains padding.

12. (Amended) The system [as claimed in] of claim 10 [or 11], further comprising [characterized by] a predetermined value of the segmentation length information [(LI)] indicating to the receiver that the higher layer data unit [(SDU)] carried in the current data segment continues to [the] a next lower level [PDU] protocol data unit.

13. (Amended) The system [as claimed in] of claim 10[, 11 or 12], wherein [characterized by] the segmentation length information [(LI) pointing] points exactly to [the] an end of the lower layer [PDU] protocol data unit [being defined to the receiver that] where the higher layer data unit [(SDU)] ends.

14. (Amended) The system [as claimed in any one] of [claims 10-13] claim 10, [characterized by] further comprising:

two or more payload units [(PU)] of a predetermined length in each lower level [PDU] protocol data unit, with two or more payload units of a predetermined length for carrying [said] the segmented higher layer data units [(SDU)], the payload unit being [the] a smallest unit in a retransmission protocol employed[,];

a segmentation indicator field [(LI)] in [the] a beginning of one or more of the payload units in the lower level [PDU] protocol data unit, if required[,]; and

at least one indicator [(D)] in [the] a header of the lower layer [PDU] protocol data unit for indicating which one or ones, if any, of the payload units [(PU)] contain the segmentation length information [(LI)].